

AMENDED SET OF CLAIMS

1. (Previously Presented) A method of preparing a photographic solid fine-grain dispersion, the method comprising the steps of:

successively bringing a slurry of a water-insoluble photographically useful compound in a grinding chamber of a dispersing machine, which chamber is filled with media,

allowing the compound to contact the media in the grinding chamber, to produce fine grains of the compound successively,

successively separating the media from the compound by centrifugal force, and

taking the compound out of the grinding chamber,

wherein the bulk density of the media is 4.0 g/cm^3 or more, the Vickers hardness thereof is 10 GPa or more, the breaking tenacity thereof is $5 \text{ MPa m}^{1/2}$ or more, and the average grain size thereof is 0.3 mm or less, and

wherein the fine grains in the solid dispersion prepared have an average grain size of $0.01 \text{ }\mu\text{m}$ to $1 \text{ }\mu\text{m}$.

2. (Original) The method of preparing a photographic solid fine-grain dispersion as claimed in claim 1, wherein the member that contacts the media of the dispersing machine, is composed of a material selected from a ceramic whose main component is substantially a zirconia or an alumina, a polyurethane, a

polytetrafluoroethylene, and a polyethylene.

3. (Original) The method of preparing a photographic solid fine-grain dispersion as claimed in claim 1, wherein the dispersion machine has such a mechanism that the same comprises a cylindrical container having a feed port and a discharge port for slurry, a screen covering the discharge port and projecting inward a dispersing container, and a rotatable shaft equipped with a plurality of stirrers; wherein at the feed port side of the cylindrical container, the grinding chamber filled with the media is arranged, and at the discharge port side of the cylindrical container, a media-separating chamber in which substantially no media exist, is arranged, respectively; wherein a disc-like rotor mounted on the rotatable shaft at the closest side to the discharge port is equipped with a stirrer member, the tip of which extends to the vicinity of a lateral face at the discharge port side of the screen; wherein, by rotation of the stirrer member, centrifugal force is applied to the media introduced into the separating chamber, and thereby the media is returned to the grinding chamber.

4. (Original) The method of preparing a photographic solid fine-grain dispersion as claimed in claim 3, wherein the member that contacts the media of the dispersing machine, is composed of a material selected from a ceramic whose main component is

substantially a zirconia or an alumina, a polyurethane, a polytetrafluoroethylene, and a polyethylene.

5. (Original) The method of preparing a photographic solid fine-grain dispersion as claimed in claim 1, wherein the dispersing machine comprises a grinding chamber filled with beads and having a feed port and a discharge port for slurry, a rotatable shaft equipped with an stirrer, and a media-separating chamber containing substantially no media, which chamber is separated by a wall from the grinding chamber and which chamber is installed with an impeller that applies by rotation a centrifugal force to the media introduced into the separating chamber to return the media to the grinding chamber taking out the slurry through a discharge passage formed in the rotatable shaft.

6. (Original) The method of preparing a photographic solid fine-grain dispersion as claimed in claim 5, wherein the member that contacts the media of the dispersing machine, is composed of a material selected from a ceramic whose main component is substantially a zirconia or an alumina, a polyurethane, a polytetrafluoroethylene, and a polyethylene.

7.-30. (Cancelled).

31. (Previously Presented) The method of preparing a photographic solid fine-grain dispersion as claimed in claim 1, wherein the grinding chamber is filled with media at a filling rate in the range of 70-90%.

32. (Previously Presented) The method of preparing a photographic solid fine-grain dispersion as claimed in claim 1, wherein said media is separated from the compound in a media-separating chamber in which centrifugal force is applied to the media thereby returning the media from the media-separating chamber to the grinding chamber.

33.-37. (Cancelled).